Memorandum

U.S. Department
of Transportation

**Federal Aviation
Administration**

Subject: INFORMATION: Halon Concentration Levels

Date: MAR - 9 1998

From: Manager, Transport Standards Staff, ANM-110

Reply to
Attn. of: 98-112-24

To: To Manager, Seattle Aircraft Certification Office, ANM-100S

The Seattle Aircraft Certification Office has requested clarification from this office regarding certification of the Boeing 727 and 737 Class D to C cargo compartment conversions. Traditionally, cargo fire extinguishing systems have been certified by demonstrating five percent initial halon concentration levels and subsequent concentration levels of three percent, when the cargo compartment has been in the empty configuration. The majority of applicants in previous certification programs have not tested or analyzed a loaded cargo compartment configuration.

Recent tests and analyses have raised concern regarding the adequacy of halon concentrations in a loaded cargo compartment. Regardless of this concern, the Transport Airplane Directorate does not currently have any written guidance, stating that applicants must test or analyze the loaded configuration. Requiring testing or analysis to show halon concentration levels remain at, or above, three percent in the loaded cargo compartment may be considered beyond the scope of what the FAA can require without public comment. Although some applicants have previously considered loaded cargo compartments, we do not require testing or analysis for the loaded cargo condition at this time.

Please note this may be considered a safety issue, which the Transport Airplane Directorate plans to address in future policy. If you wish to discuss this matter further, please contact Kristin Larson, phone 425-227-1760.

for Stewart R. Miller

cc: Mark Quam, ANM-113
Robert Stacho, ANM-130L
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